

REMARKS

The application has been reviewed in light of the Office Action mailed October 22, 2003. Claims 41-44 have been amended without addition new matter. Applicants reserve the right to pursue the claims in their pre-amended form in this and other applications. Reconsideration is respectfully requested in light of the following remarks.

The drawings are objected to under 37 CFR 1.83(a), because they must show the “second slide mechanism and the fo[u]rth section.” The Office Action states that a proposed drawing correction is required. As requested, Applicants are submitting herewith an Annotated Drawing Sheet containing a proposed new Figure 11. The new Figure 11 is a copy of Figure 1 of the as-filed specification, with added markings showing that the combination of a slide mechanism 70 and top plate 40 is represented by numeral 301, and shows a block 303¹ that represents a second slide mechanism and another top plate (or “fourth section” of claim 12). The additions to original Figure 1 are shown in red ink. The specification has been amended to explain the addition of Figure 11. No new matter has been added, as the new markings merely illustrate what is clearly described on page 10, lines 1-10, of the as-filed specification. After new Figure 11 is deemed acceptable, Applicants will submit a formal version of the Figure.

Claim 12 and 24 stand rejected under 35 U.S.C. § 112, first paragraph, because “[w]ithout providing any structural description or drawings of the second sliding mechanism of the fo[u]rth section there is no way to determine the scope of claims 12 and 24. As no structural limitations for claims 12 and 24 have been disclosed and the scope of the claim is indeterminate at this time claims 12 and 24 have not been treated on the merits.” Office Action, page 2.

¹ 37 CFR 1.83(a) provides that “where ... detailed illustration is not essential for a proper understanding of the invention, [it] should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation (e.g., a labeled rectangular box).”

The Examiner's attention is directed to the following excerpt from the as-filed specification:

The lift and align table in accordance with the present invention can further include a second slide mechanism 70 to enable alignment in a direction perpendicular to the direction indicated by arrows 71. For example, a second slide mechanism can be mounted on the top surface 42 of the upper plate 40. The second slide mechanism would be installed so that the direction of the movement of the lead block 198 is perpendicular to the direction of arrows 71. Then, another top plate would be installed over the second slide mechanism, as described above, thereby allowing adjustments of the top plate, using the two slide mechanisms, in two directions within the same plane

Specification, page 10, lines 1-10, with reference to Figures 1, 7 and 8. Thus, the specification fully enables a second sliding mechanism 70, which is illustrated in Figure 7, which can be mounted on the top surface 42 of the upper plate 40, such as the example illustrated in Figure 8. The specification further explains that "another top plate," or the claimed "fourth section," can be "installed over the second sliding mechanism." Thus, claims 12 and 24 are in full compliance with 35 U.S.C. § 112.

Claim 35 stands rejected under 35 U.S.C. § 112, first paragraph, as "not enabled for assisting the turning of the input shaft with gas cylinders. In the rejection of claim 35 below the examiner treats the limitation of using the gas cylinder as if it were used to help lift or lower the first section in conjunction with the jackscrews." Office Action, page 3.

Claim 35 recites a method comprising "manually rotating an input shaft attached to jacking mechanisms and supplying a pressurized gas to gas cylinder assemblies to assist said rotating of said input shaft." The specification provides full enablement for this limitation. For example, the specification discloses that "the gas cylinder assemblies 50 may be used to assist the lift mechanism 60 [which has the jacking mechanisms] to move the middle plate 30 in the direction of arrows 61." Specification, page 5, lines 4-5 (emphasis added). In another example, the specification states that "[i]n one embodiment,

the function of the gas cylinders 50 is to assist with the vertical movement of the middle plate 30 relative to the base frame 20. The force exerted by the pistons 54 on the middle plate 30 will be complementary to the force applied to the middle plate 30 by the jacking mechanisms 80.” Specification, page 10, lines 2-6 (emphasis added). Thus, the subject limitation of claim 35 is in full compliance with the requirements of 35 U.S.C. § 112.

Claims 1, 8-11, 25, 32 and 33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Beach, U.S. Patent No. 2,931,519 (hereinafter “Beach”), in view of Bressler et al., U.S. Patent No. 6,136,375 (hereinafter “Bressler”). This rejection is traversed for the following reasons.

Initially, Applicants wish to state that the Examiner, again, has not responded to the following arguments regarding the shortcomings of Beach with respect to the pending claims. The arguments were set forth in the Request for Reconsideration submitted on June 12, 2003, and in the Amendment dated July 14, 2003.

Claim 1 recites a “sliding mechanism comprising a block and a lead screw for moving said block.” The moving sliding block is shown, for example, as element 198 in Figure 7 of the specification. In a preferred embodiment, the block 198 moves linearly in response to rotation of lead screw 196. Specification, page 11, lines 9-15. The Office Action proposes that Beach teaches a “block (111)” which corresponds to the claimed moving block. Office Action, page 4. To the contrary, element 111 of Beach is opposite to the claimed movable block. Element 111 in Beach is nut which is “anchored to an end beam ... of the upper dolly frame.” Column 7, lines 40-43 (emphasis added). Thus, element 111 in Beach has nothing in common with the claimed moving block because it does not move.

Further, claim 1 recites a “third section disposed over said sliding mechanism and attached to said block.” This is an important feature of the claimed invention. The specification discloses, for example, an upper plate 40 which is mounted to the sliding mechanism. Specification, page 11, lines 16-25.

Beach fails to teach or suggest this limitation. The Office Action asserts that Beach discloses a sliding mechanism “comprising a block (111) and a lead screw (110),” and a “third section (13) [is] disposed over said sliding mechanism and attached to said block.” Office Action, page 4. There is no basis for this assertion. In Beach, the “third section (13)” is not “disposed over said sliding mechanism” -- it is the sliding mechanism. Elements 111 and 110 in Beach are part of the assembly 13. See column 7, lines 10-50 and Figure 2. The assembly 13 cannot be the claimed “sliding mechanism” and at the same time a “third section disposed over said sliding mechanism.”

The Office Action does not rely on Bressler to teach any of the above discussed claim limitations, and, in any event, Bressler does not teach or suggest such limitations. Thus, claim 1 is allowable over Beach in view of Bressler, even if the two references are properly combinable under 35 U.S.C. § 103 (and they are not, as discussed below). For at least these reasons, claim 1 is allowable.

In addition, claim 1 recites that the sliding mechanism comprises “slider blocks having slide rails.” The Office Action admits that Beach fails to teach or suggest this limitation, and relies on Bressler for this shortcoming. Bressler relates to a method of applying a printing medium to a printing roll employed in rotogravure printing. Rotogravure printing is a commercial printing process that controls ink thickness and area of coverage. Bressler discloses a mechanism comprising a platform 22 having guide rails 24. A carriage 32, having supports 30 engaged with the guide rails 24, moves along the platform 22.

According to the Office Action, it would have been obvious “to one of ordinary skill in the art ... to provide the device taught by Beach with the guide rails and blocks taught by Bressler et al. in order to keep the first and second sections in alignment at all times while allowing for linear adjustments as needed.” Office Action, page 4. The proposed combination is a blatant hindsight reconstruction, where the Office Action simply picks and chooses elements from prior art references to come up with the claimed combination. The only motivation for such a combination is the Applicant’s claim itself.

Beach relates to an aircraft component dolly for moving jet engines. The Beach dolly has a mechanism for precise linear adjustments – adjuster assembly 13. The assembly 13 includes two carriages 103 that are connected by telescoping tubular rods 106. Carriages 103 are supported by rollers 104 such that the carriages 103 can move linearly along tracks 105. Thus, Beach discloses a mechanism suitable for linear movement of jet engines.

Bressler relates to a device used in the printing industry. The device has a carriage with supports which slide on guide rails of a platform. There exists absolutely no motivation to somehow substitute this assembly for the adjuster assembly 13 of Beach. Beach already has an assembly which is suited for the application for of axially moving aircraft engines on a dolly. Such an assembly, as disclosed by Beach, has carriages, connected by telescoping rods, and is supported by rollers that move linearly in tracks. The wild assertion that this assembly may for some reasons be removed, and substituted for with a slide and guide rails imported from the printing industry is nothing more than imagination on behalf of the Office Action.

There exists no motivation for the proposed combination. Beach identifies no problem with its adjuster assembly 13, and Bressler does not propose that its printing industry-mechanism should somehow be used for moving aircraft engines. Thus, no motivation exists in the references themselves for such a combination. And, the Office Action's reliance on the "skill in the art" component for motivation is misplaced because there is no motivation for the proposed combination based on the nature of the problem to be solved or the teachings of the prior art. As explicitly provided in MPEP:

A statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993).

MPEP 2143.01. The level of skill in the art component cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308 (Fed. Cir. 1999); MPEP 2143.01. The Office Action's bare reliance on the "skill in the art" for motivation is improper.

Thus, the proposed combination is not proper under 35 U.S.C. § 103. This is another reason why claim 1 is allowable over Beach and Bressler, taken alone or in combination. Claims 8-11 depend from claim 1 and should be allowed for at least the same reasons as claim 1. In addition, claims 8-11 recite other limitations which, in combination with their base claim, are not taught or suggested by the references, taken alone or in combination.

Claim 25 recites an apparatus having a "mechanism for sliding an object ... wherein said mechanism for sliding comprises a lead screw and a movable block mechanism, and slider blocks having slide rails." As discussed above with respect to claim 1, Beach fails to teach or suggest this limitation, and Bressler does not remedy the deficiency. Also, the references are not properly combinable. For at least these reasons, claim 25 is allowable. Claims 32 and 33 depend from claim 25 and should be allowable for at least the same reasons.

Claims 13, 17, 19-23 and 34 stand rejected under 35 U.S.C. § 103 as being unpatentable over Beach and Mills et al., U.S. Patent No. 4,461,455 (hereinafter "Mills"), and further in view of Nemoto, U.S. Patent No. 6,271,657 (hereinafter "Nemoto"). Reconsideration is requested for the following reasons.

Claim 13 recites "a lifting mechanism disposed between said base frame and said first section for lifting and lowering said first section in a vertical direction with respect to said base frame, said lifting mechanism comprising a jacking screw mechanism and a gas cylinder assembly, said jacking screw mechanism having a manual drive mechanism." The Office Action admits that Beach fails to teach or suggest a "lifting mechanism being a combination of a manual jack screw and a pneumatic lift device." For this shortcoming,

the Office Action attempts to rely on Mills, but admits that even Mills “do[es] not teach the jackscrew as being manually actuated.” For this shortcoming, the Office Action relies further on Nemoto. Office Action, page 6.

This proposed combination is another example of the Office Action’s gymnastics of combining different references with nothing but the claimed invention as the road map. With such practice, not a single invention comprising innovative combinations of mechanical components would ever be patentable. The Office Action would simply find other references that disclose, separately, the concepts taught by the invention, and proclaim that the invention is obvious. The MPEP and law specifically reject this type of practice.

Initially, Beach and Mills are not properly combinable as outlined in the Request for Reconsideration dated June 12, 2003 (page 3), and the Amendment dated July 14, 2003 (page 11), and this rejection should be withdrawn for at least that reason. The argument that Beach and Mills are not properly combinable has yet to be addressed by the Examiner.

Further, it would not have been obvious to combine Nemoto with the other two references. The Office Action offers that motivation to combine Nemoto with Beach and Mills is to “allow the apparatus to align the object being lifted with its intended receiver in a manner that minimizes the chance of damage to the object which it is being mounted.” Office Action, pages 6-7. This statement is based on nothing in the references. Beach and Mills say nothing about improving their jacking systems to achieve the Office Action’s proposal. And, Nemoto, which is directed toward a positioner for semiconductor device testing, is wholly unrelated to Beach and Mills, which relate to aircraft engine positioning devices. Again, the only reason for the proposed combination is the Applicant’s disclosure.

For at least these reasons, claim 13 is allowable over the asserted combinations. Claims 17 and 19-23 depend from claim 13 and should be allowed for at least the same reasons as claim 13.

Claim 34 recites a “lifting and lowering mechanism comprising at least four jacking screws having a manual transmission system for operation of said jacking screws, said lifting and lowering mechanism further comprising at least two gas cylinders having a pressurized gas source for operating said gas cylinders.” Claim 34 is allowable for at least the reasons discussed above in connection with claim 13. Further, claim 34 recites that the “said gas cylinders assist said jacking screws in said lifting and lowering mechanism.” The cited references, taken alone or in combination, fail to teach or suggest this claim limitation, and the Office Action does not contend to the contrary. This is an additional reason why claim 34 is allowable. This argument, which was raised in the Amendment dated July 14, 2003, has not been addressed by the Examiner.

Claims 35, 39-42, 44 and 45 stand rejected under 35 U.S.C. § 103 by Beach in view of Nemoto. This rejection is traversed for the following reasons.

Claim 35 is believed to be allowable for at least the reasons set forth in the Request for Reconsideration, which have yet to be addressed. Further, claim 35 recites that supplying the pressurized gas to the gas cylinder assemblies is to “assist said rotating of said input shaft.” The cited references, taken alone or in combination, fail to teach or suggest this limitation, and this is another reason why claim 35 is allowable. This argument was raised in the Amendment dated July 14, 2003, and has yet to be addressed by the Examiner. Moreover, as discussed above, Beach and Nemoto are not properly combinable. Claims 39 and 40 depend from claim 35 and should be allowed together with claim 35.

Claim 41 has been amended to recite “providing a base frame, a top frame, and a middle frame disposed between said base frame and said top frame; [and] providing a lift mechanism, having jacking mechanisms and gas cylinder assemblies, between said base

frame and said middle frame.” As discussed above with respect to claim 35, Beach in view of Nemoto fail to render obvious this claim limitation. For at least these reasons, claim 41 is allowable. Claims 42, 44 and 45 depend from claim 41 and is allowable together with claim 41, and also because the unique combinations recited by these dependent claims are neither taught nor suggested by the cited prior art.

Dependent claims 2-4, 7, 26-28 and 31 stand rejected under 35 U.S.C. § 103 as being anticipated over Beach in view of Bressler as applied to claims 1 and 25 above, and further in view of Mills. As discussed above, Beach and Bressler, taken alone or in combination, fail to render obvious claims 1 and 25, and Mills adds nothing to remedy those deficiencies. Claims 2-4 and 7 depend from claim 1, and claims 26-28 and 31 depend from claim 25. Dependent claims 2-4, 7, 26-28 and 31 are allowable for at least the reasons for allowance of claims 1 and 25, and also because the unique combinations recited by these dependent claims are neither taught nor suggested by the references, taken alone or in combination. In addition, the Mills is not properly combinable with Beach and Bressler, which itself is an improper combination.

Dependent claim 18 stands rejected under 35 U.S.C. § 103 as being unpatentable over Beach, Mills, and Nemoto as applied to claim 17 above, and further in view of Bressler. Claim 17 is dependent from claim 13, and as discussed above with respect to claim 13, the combination of Beach, Mills, and Nemoto is without merit. For at least these reasons, claim 18 is allowable. Moreover, the proposed addition of another reference, Bressler, to the already improper combination of Beach, Mills and Nemoto, is also improper.

Dependent claim 43 stands rejected under 35 U.S.C. § 103 as being upatentable over Beach in view of Nemoto as applied to claim 41 above, and further in view of Shiiba et al., U.S. Patent No. 4,643,630 (hereinafter “Shiiba”). Claim 43 depends from claim 41. As discussed above, amended claim 41 is allowable over the proposed combination of Beach and Nemoto, and Shiiba adds nothing to remedy those deficiencies. Thus, claim 43 is allowable for at least the reasons for allowance of its base claim 41. In addition, the

Applicants do not agree that Shiiba is properly combinable with the already improper combination of Beach and Nemoto.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Dated: January 22, 2003

Respectfully submitted,

By 

Thomas J. D'Amico

Registration No.: 28,371

Peter A. Veytsman

Registration No.: 45,920

DICKSTEIN SHAPIRO MORIN &
OSHINSKY LLP

2101 L Street NW

Washington, DC 20037-1526

(202) 785-9700

Attorneys for Applicant

#15



ANNOTATED DRAWING SHEET

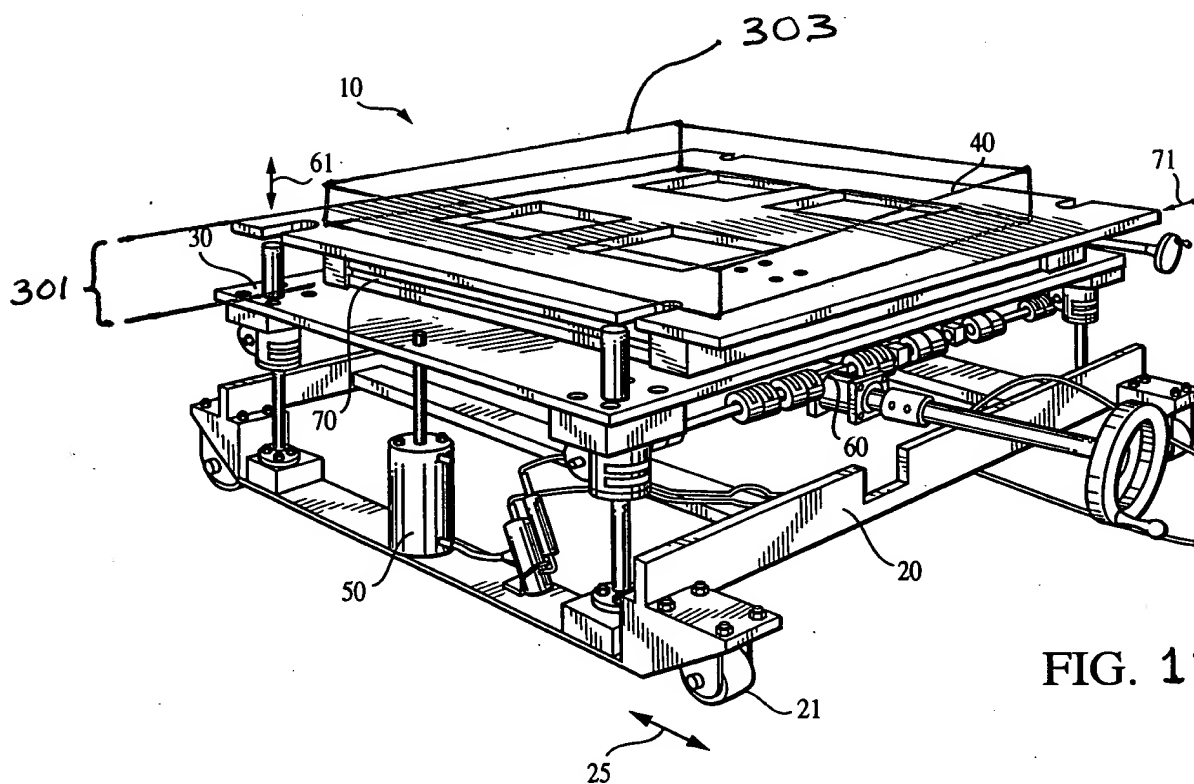


FIG. 11